THE CURVE-BILLED THRASHER IN OKLAHOMA

By GEORGE MIKSCH SUTTON

The Curve-billed Thrasher, *Toxostoma curvirostre,* nests locally, but I believe quite regularly, in the extreme northwestern corner of the Oklahoma Panhandle, at about latitude 37° N., in the semi-arid Black Mesa country of Cimarron County. This habitat, which is at about 4000 feet elevation, hence well below the top of the Black Mesa, and which is close to both the New Mexico and Colorado state-lines, is well over 100 miles east of north from the northeasternmost locality in New Mexico at which *Toxostoma curvirostre* has been known to breed, and fully 250 miles northeast of the northeasternmost tip of the accepted general range of the species in that state (see Florence Merriam Bailey, "Birds of New Mexico," 1928, p. 556). Furthermore, nothing either in the original description of *Toxostoma curvirostre celsum* Moore (Proc. Biol. Soc. Washington, 54, 1941:211-216) or in the A.O.U. Committee's statement of range covering that form (see Twentieth Supplement to the American Ornithologists' Union Check-list of North American Birds, Auk, 62, 1945:446) indicates that any race of *Toxostoma curvirostre* is known to occur in Oklahoma, the Texas Panhandle, or, for that matter, anywhere to the north of those parts of New Mexico indicated in Mrs. Bailey's distribution map. As for the allegedly smaller, lighter-colored race, *Toxostoma curvirostre oberholseri* Law, which is said to inhabit "southeastern Texas and northeastern Mexico (Tamaulipas, Nuevo Leon, and Coahuila)" (see A.O.U. Check-list, 1931, p. 253); the northwesternmost point at which that form was believed by its describer to occur was, apparently, extreme northern Coahuila, a part of Mexico lying approximately 500 miles south of the northwest corner of the Oklahoma Panhandle (see Law, Condor, 30, 1928:151).

Actually, the range of *Toxostoma curvirostre* must be more or less continuous throughout the less mountainous parts of western Texas from northern Coahuila (and Texas directly north of Coahuila) northwestward to the southern boundary of New Mexico and perhaps to the whole of the eastern boundary as well. In Brewster County, Texas, Josselyn Van Tyne and I found it fairly common at least as far north as the Glass Mountains (15 miles northeast of Marathon) and Alpine (see Misc. Publ. Mus. Zool. Univ. of Michigan, No. 37, 1937:71-72). In the Guadalupe Mountain region of Texas, Burleigh and Lowery (Occas. Pap. Mus. Zool. Louisiana State Univ., No. 8, 1940:122-123) found it "common and well distributed in the open desert at the foot of the ridges" in summer.

The race to which these west Texas birds belong is somewhat problematical. Van Tyne and I assigned Brewster County specimens to the nominate race rather than to *oberholseri,* for we felt that the "mass average" differences in wing and tail length between the two races were not great enough to be significant. H. C. Oberholser, on the other hand, believed that at least two of our Brewster County birds—a breeding pair from the vicinity of Glenn Spring, in the southern part of the county—were *oberholseri.* I think he did not publish on this finding, and Van Tyne and I, unaccountably enough, made no comment on the matter in our paper. As for Guadalupe Mountain birds, Burleigh and Lowery called them *T. c. curvirostre. Celsum* was not described until 1941, of course. It is regrettable that in the original description of this race there was no discussion of the Texas part of the subspecies' range.

I first encountered the Curve-billed Thrasher in Oklahoma in early June of 1936, not far from the village of Kenton, in the broad, and at that time rather heavily grazed valley of Tesquesquite (locally called "Texakeet") Creek, a tributary of the Cimarron

River. From June 1 to 5 that year I observed a thrasher several times at great distance as it flew from one clump of cholla cactus to another. On June 5, I collected the female (GMS 6884) of one breeding pair, and, a mile or so away, in the same valley, found another pair and its nest, which contained three small young (see Sutton, Auk, 53, 1936:434). The species had not theretofore been recorded anywhere in Oklahoma (see Nice, "Birds of Oklahoma," 1931).

The following year T. D. Burleigh, G. H. Lowery, Jr., J. B. Semple, K. W. Haller and I saw the Curve-billed Thrasher repeatedly along Tesquesquite Creek, near Kenton, in mid-May, but failed to find the species anywhere else in the Black Mesa country. On May 21, Semple took a singing male (GMS 7457) in which the gonads were greatly enlarged, but we failed to discover the bird's mate or nest. On May 22, I also took a singing male (GMS 7472) whose gonads were greatly enlarged, but whose mate and nest we failed to find. On May 23, Haller and I located a pair of birds, both of which were scolding noisily. Haller found the nest of this pair in the very heart of a dense clump of cholla cactus about four feet from the ground. I collected the female (GMS 6884) and one of the young, all four of which were about ready to leave the nest. The nestling specimen, a female (GMS 7478), had a tail length of 37 mm. Wisps of dark down clung to the tips of the crown, scapular, and lower back feathers (see Sutton, Auk, 55, 1938:505).

Now, whether this Oklahoma breeding population is completely isolated or not—and I refuse to believe that it is—we certainly must include the northwestern corner of the Oklahoma Panhandle in the breeding range of *Toxostoma curvirostre*. But to what subspecies do the birds belong? The four above-mentioned specimens I originally (1936 and 1938) referred to the nominate race, although I was admittedly puzzled by the plainness of the under parts and shortness of the tail in the two males. All three adult birds were, I believed, too long-winged for *oberholseri*, and furthermore I entertained misgivings as to the validity of that race. The spots on the tips of the outer rectrices were clear white, that much was certain: the birds were not *T. c. palmeri* (Coues).

Kenneth C. Parkes has been good enough to send the four moot specimens from Cornell University and I have just re-identified them. The males are certainly far too free of spotting below, especially on the upper belly; too free of buffy tones on the lower belly, flanks, and under tail coverts; and somewhat too pale a gray throughout the upper parts for typical *celsum*. Furthermore, they are too short-tailed for that race, although in each specimen the rectrices are so obviously frayed at the tips as to make the tail-length not wholly satisfactory. As for the female specimen, it is much more readily placeable as *celsum*, not only on the basis of the heavy spotting below and richness of the buffy tone of the lower belly and under tail coverts, but also, surprisingly enough, on the basis of both wing and tail lengths. Measurements of the Oklahoma birds together with the measurements of *celsum* and *oberholseri* as given by Moore and Law (*loc. cit.*), respectively, are given in Table 1.

Study of the above measurements, and direct comparison of the three Oklahoma adults with specimens of *celsum* (from Brewster and Jeff Davis counties, Texas; Fort Bayard, Grant County, New Mexico; Pilares, Sonora; Chapulco, Puebla; and Jaumave, Tamaulipas) and *oberholseri* (from Cameron, Bexar, and Webb counties, Texas) in the University of Michigan Museum of Zoology collection convinces me that the Oklahoma birds are, on the whole, closer to those of New Mexico than to those of extreme southern Texas. The wing and bill lengths of the Oklahoma males are greater than those of *any* male of *oberholseri* measured by Law; and the tail length of the Oklahoma males certainly would be somewhat greater were not the feather-tips so badly worn. We cannot be blind to the fact that the Oklahoma males are much more lightly spotted and much

Table 1
Measurements of the Curve-billed Thrasher

Adult males	Wing	Tail	Exposed culmen	Tarsus
GMS 7457 (Oklahoma)	111.0	107.0	31.5	34.0
GMS 7472 (Oklahoma)	110.0	109.0	32.0	34.0
18 *celsum* (Arizona to Durango)	109.7 (103.4-117.0)	112.7 (101.6-121.9)	30.5 (27.1-32.5)	33.3 (31.0-35.0)
10 *celsum* (Chiricahua Mountains)	108.9 (103.8-112.5)	112.4 (107.7-117.3)	31.1 (29.1-32.9)	34.6 (32.6-35.8)
13 *celsum* (Aguascalientes to northwestern Guanajuato)	112.0 (107.5-116.6)	112.6 (106.8-124.1)	30.5 (26.9-32.8)	34.5 (33.0-35.8)
10 *oberholseri* (Lower Rio Grande Valley)	102.9 (98.3-108.4)	105.1 (98.2-110.5)	28.0 (25.8-29.9)	34.4 (32.3-36.2)
Adult females				
GMS 6884 (Oklahoma)	113.0	113.0	29.0	32.0
20 *celsum* (Arizona to Durango)	107.7 (100.3-115.1)	111.8 (106.0-117.5)	30.0 (27.4-32.0)	32.9 (31.2-34.7)
15 *celsum* (Aguascalientes to northwestern Guanajuato)	108.8 (105.1-113.6)	110.6 (105.1-117.0)	28.5 (27.0-31.2)	32.4 (29.3-34.4)

less buffy below than any specimen of *celsum* at hand; but the female Oklahoma bird is very nearly as dark below as the darkest *celsum* in our series, and the fact that this female is actually longer in wing and tail dimensions than either of the Oklahoma males is not to be forgotten. A suspicion lingers that fall males, in fresh, unfaded plumage, would be at least as dark as this female. Possibly the best disposition of the Oklahoma birds at present is to call them intermediate—the males *celsum* in wing length and bill length, the female *celsum* both in size and in color.

How the breeding population of *Toxostoma curvirostre* in northwestern Oklahoma is connected with the range of the species as a whole is, of course, a matter of conjecture at this writing. There certainly is no mountain range, desert or forest of sufficient magnitude to isolate completely the Oklahoma birds from those of southern New Mexico or southwestern Texas. If, as comparison of the maps on page 556 and plate 2 (opposite page 6) in Mrs. Bailey's "Birds of New Mexico" will suggest, the range of the Curve-billed Thrasher coincides with the Lower Sonoran Life-zone in the southwestern quarter of New Mexico, it is natural to believe that the bird may inhabit also the valley of the Pecos River, ranging possibly as far north as Santa Rosa, Guadalupe County. Why it has not been taken along the Pecos I do not know, but I strongly suspect that it occurs there; and, furthermore, I suspect that it ranges northward through the western part of the Panhandle of Texas; thence westward into New Mexico along the Canadian River; and also northwestward (avoiding almost the whole of the Oklahoma Panhandle, which I know from personal observation would not meet the nesting requirements of the species) to the Black Mesa country of extreme northeastern New Mexico, the northwestern corner of the Oklahoma Panhandle, and southeastern Colorado. An important feature of this whole hypothetical Curve-billed Thrasher habitat is the cholla cactus, *Opuntia imbricata* (Haworth) De Candolle, a plant in which the bird indubitably

likes to nest and which is found, acording to Britton and Rose ("The Cactaceae," Vol. I, 1919:64) from "Central Colorado to Texas, Oklahoma, New Mexico and Central Mexico." I did not preserve a specimen of the somewhat arboraceous cholla in which the Curve-billed Thrashers were nesting near Kenton, Oklahoma, but our expedition's photographs show the plant quite clearly, and Dr. E. U. Clover, of the University of Michigan Department of Botany, who has been good enough to go over this entire matter with me, is convinced that the plant is *Opuntia imbricata*.

The A.O.U. Check-list range of *Toxostoma curvirostre celsum* should, then, include the extreme northwestern corner of the Oklahoma Panhandle. If my belief that the bird breeds wherever *Opuntia imbricata* (or a closely allied cactus) flourishes is at all well founded then it probably will be found also in southeastern Colorado and at various points along the eastern boundary of New Mexico. More field work obviously needs to be done in this promising region.

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